

## Claims

[c1] A *Conforming Lid Socket* for connection to the leads of a surface mount package, said package having a body and each said lead is formed in "L" shape having a downwardly extending section proximate a side of said body and outwardly extending section proximate a bottom of said body,

said *Conforming Lid Socket* comprising:

a rigid lid having a thickness and opening that allow encase specific surface mount package, said opening having downwardly extending wall proximate a side of said body, said rigid lid having bottom flat conforming surface proximate a bottom of said body,

a plurality of said lead downwardly extending section pressing against said wall, said conforming surface pressing against said lead outwardly extending section having a bottom connection surface,

a plurality of said connection surface connecting to a substrate bearing contacting element, said circuit having a thickness and a bottom surface proximate a bottom of said body,

a rigid support plate having a thickness and a top surface proximate a bottom of said circuit, said top surface

pressing against said bottom surface.

- [c2] The *Conforming Lid Socket* of [c1] having said substrate bearing contacting element on a production printed rigid circuit board and said rigid support plate to keep said rigid circuit board straight.
- [c3] The *Conforming Lid Socket* of [c1] having said substrate bearing contacting element on a production printed flexible circuit board and said rigid support plate to keep said flexible circuit board straight.
- [c4] The *Conforming Lid Socket* of [c1] having said substrate bearing contacting element on a production printed extra thick circuit board without said rigid support plate.
- [c5] The *Conforming Lid Socket* of [c1] having said substrate bearing contacting element connected to a pin, a plurality of said pin having virtually any footprint required for surface mount or through-hole applications.
- [c6] The *Conforming Lid Socket* of [c1] wherein said connection surface and said contacting element having negligible parasitic inductance compared to conventional sockets with conforming contact pins.
- [c7] The *Conforming Lid Socket* of [c1] wherein said connection surface and said contacting element having negligible

parasitic capacitance compared to conventional sockets with conforming contact pins.

- [c8] The *Conforming Lid Socket* of [c1] wherein said connection surface and said contacting element having no additional resistance compared to conventional sockets with conductive polymer.